

Network Backup Solution For Windows OS

User Guide

Initial draft v1.0 03/07/2017 by Frank Li
Reviewed v1.1 03/07/2017 by Dong Zheng
Updated v1.2 07/07/2017 by Frank Li

Updated v1.2.1 12/07/2017 by Frank Li

Updated v1.3 29/08/2017 by Michael Yang & Dong Zheng

1. Background

We are requested to provide a network ghost backup solution to Windows desktop and servers. After an intensive market scan, we concluded the AOMEI Backupper is the best and the easiest application to fulfill the requirements.

2. AOMEI Backupper

AOMEI Backupper is designed for PC and Server to backup and restore data and files, and it can be installed in PC and Server. You can easily use it to backup file, partition, disk and system. Once your data loses or system crashes, you can use AOMEI Backupper to restore system image, or other data, and it can restore system image between dissimilar hardware. If you use some important files frequently, you can use File Sync to backup files, because you can read files directly without decompressing or exploring image.

Main Functions:

- Backup Options: file backup, system backup, disk/partition backup, etc.
- Clone Options: disk clone, partition clone, system clone.
- Supports schedule backup, incremental backup and differential backup.
- Support dissimilar hardware restore.
- Utilities: PXE boot tool, merge images, create bootable disk, check image.

3. Advantage & Disadvantage

Comparison to other backup solutions:

Advantage:

- Price: Unlimited site license.

- Uptime & Availability: There is no system downtime when backing up.
- Methodology: AOMEI Backupper provides backup GUI and function in windows. Backups can be made as system backup, partition backup or disk backup depending on users' needs. Backup files can be saved to network drive while backing up or afterwards by a backup transfer (sync) scheduler task. No like others, there is no agent needed as Backupper is an individual software running standalone.
- Simplicity: Only one software needs to be installed. Schedule is based on windows task scheduler. Simple backup schedule setup. Simple restore method by using recovery disc.

Disadvantage:

- Backupper is a standalone software. Each Backupper installed on PCs cannot be centralized and managed by administrator. It's running as a standalone backup software pre-configured by administrator.

4. System Support

OS:

Windows 2016/2012/2008/2003, XP/Vista/7/8/10

Backup:

System Backup: Backup Windows and create an image of system partition

Disk Backup: Backup hard disks to an image file

Partition Backup: Backup partitions or dynamic volumes to an image file

File Backup: Backup files and folders to an image file

File Sync: Backup folders by file sync, support Real-time sync

Restore:

PXE Restore

Recovery Disc Restore

Clone:

Disk Clone: Clone a hard disk drive to another

System Clone: Clone or migrate your system to SSD or other disk

Partition Clone: Clone a partition or volume from one to another

Utilities:

Check Image: check the data integrity of the backup image

Explore Image: Mount an image to a virtual partition for browsing

Import / Export Configuration: Manage backup tasks

5. System Requirement

It's recommended to have at least one additional partition besides system partition where Windows is located even Backupper supports realtime backup sync to network drive.

6. Software Installation

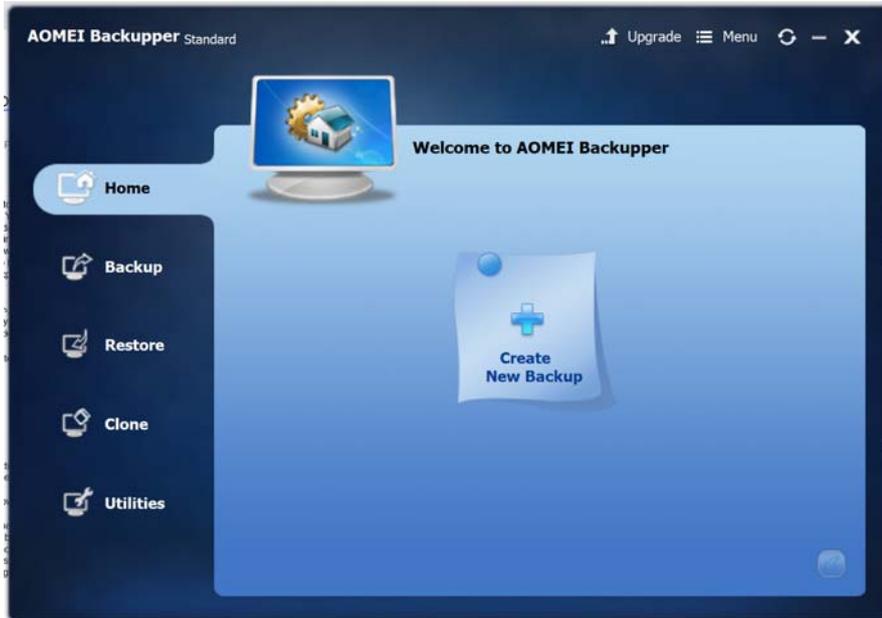
AOMEI Backupper Standard 4.0.4 can be found in your unit network drive. (please contact us)

Follow the installer instruction to the end.



7. Backup Task Setup

Run Backupper:



7.1 System Backup



7.1.1 Disk Layout

We suggest your workstation either has 1 disk with 2 partitions Eg.

Scenario 1: One Disk

Drive C (Windows Partition)	Drive D (Backup Dest)
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Scenario 2: Two disks with multiple partitions

Disk 1

Drive C (Windows Partition)	Drive D (Other Partition)	Drive E (Other Partition)
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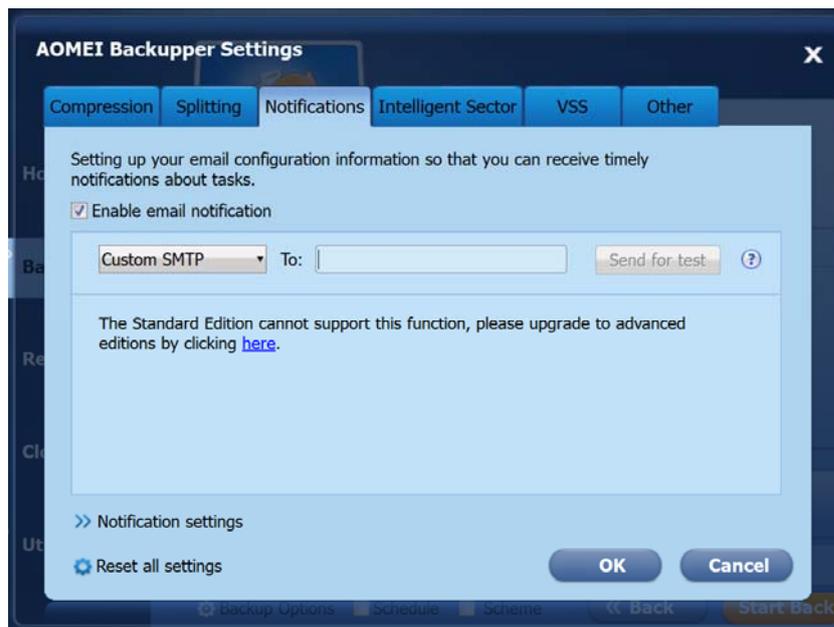
Disk 2

Drive X... (Backup Dest)
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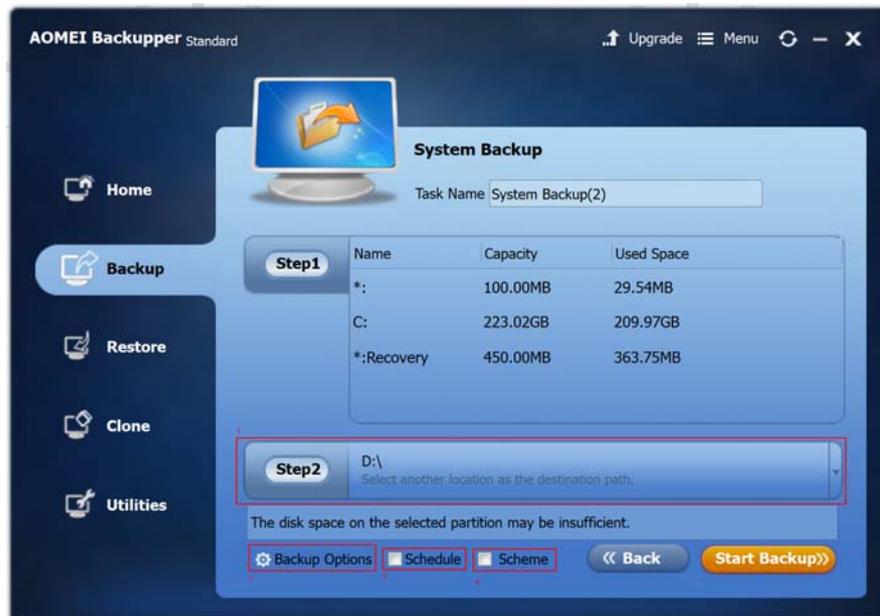
“Partition” & “System” Backup can only be made when hard drives meet scenario 1 & scenario 2

“Disk Backup” can be made only when hard drive layout meet scenario 2

7.1.2 Email Notification Setup



7.2 System Backup Setup



- Task Name: The backup image will be stored under a folder with this name
- Step 1: is showing the partitions automatically selected by Backupper.
- Step 2: A destination location for backup needs to be selected.

7.3 Suggestions:

Naming Protocol:

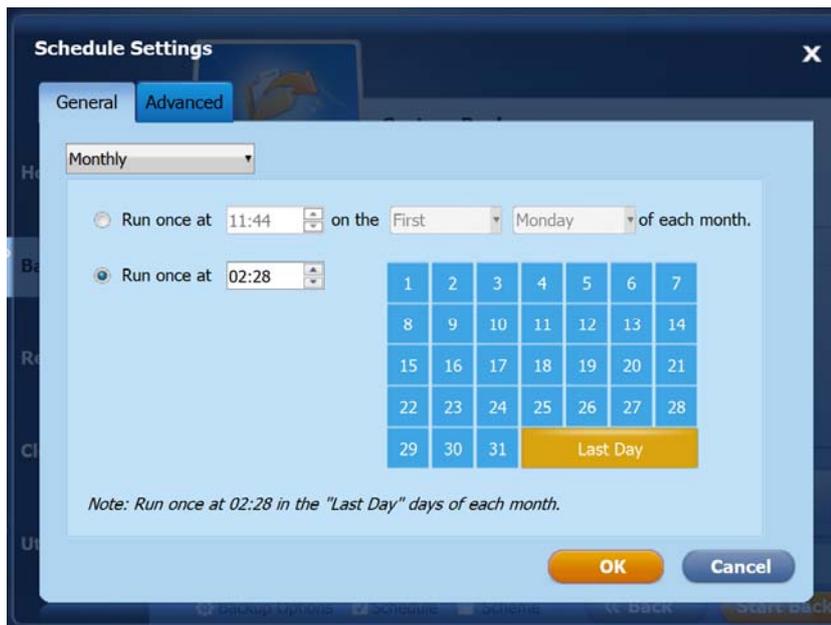
Task Name: [Instrument Name]_[Type]_[Backup Cycle] (Space replaced with _)

Task Name: TEM 1400_DISK_MONTHLY

Step2: Second partition / disk under Backups folder



Tick Schedule:



Schedule Schema:

To minimize the performance impact on data server and the time on instrument PC, we suggest the settings as below:

First Sat of each month: BMIF

First Sun of each month: BRIL FLOW

Second Sat of each month: BMSF

Second Sun of each month: NMR SPECLAB XRF

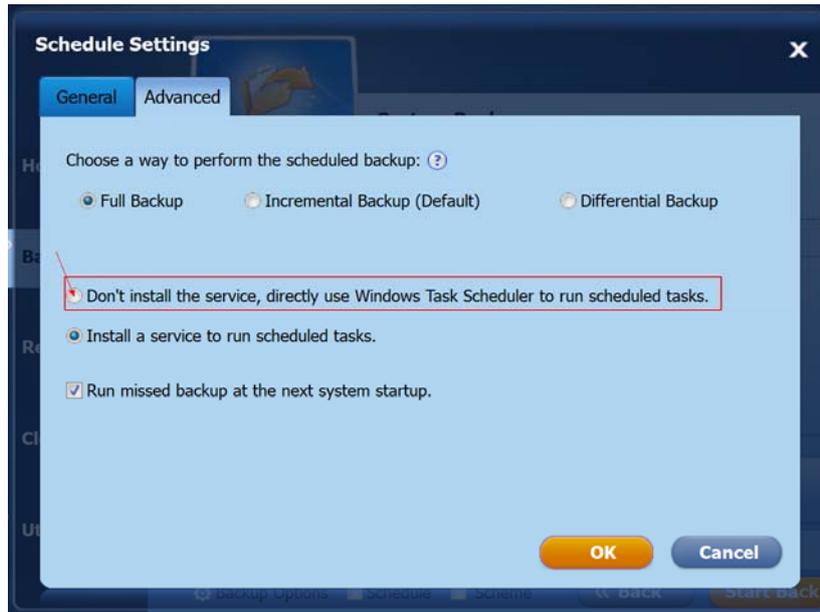
Third Sat of each month: XRD ICP SSL

Third Sun of each month: EMU

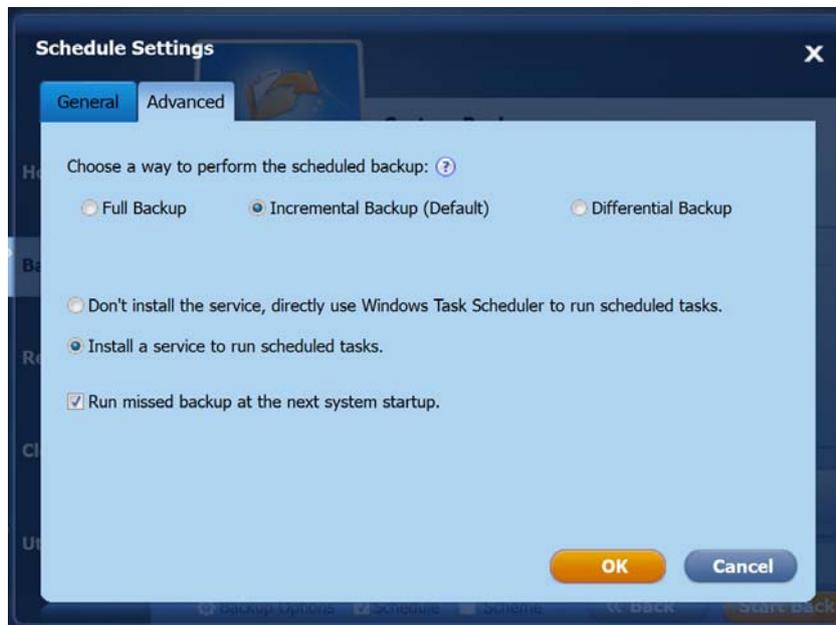
Backup: 2:30am

Sync: 4:30am

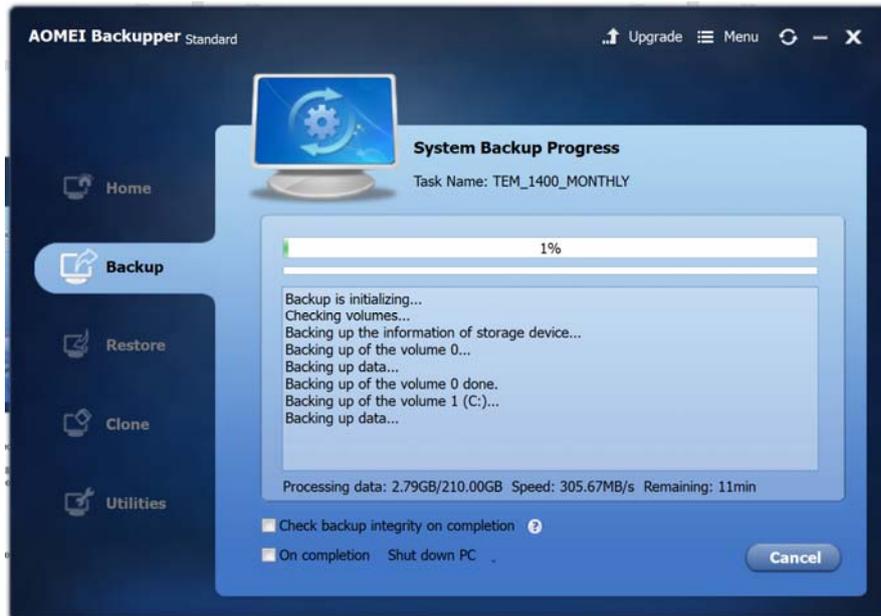
Labs	Schedule	Network Location
BMIF (C25)	First Sat of month	//129.94.xx.132/ghost_images/bmif/c25
BMIF (E26)	First Sun of month	//129.94.xx.132/ghost_images/bmif/e26
BRIL FLOW	First Sun of month	//129.94.xx.132/ghost_images/bril //129.94.xx.132/ghost_images/flow
NMR SPECLAB XRF	Second Sat of month	//129.94.xx.132/ghost_images/nmr //129.94.xx.132/ghost_images/speclab //129.94.xx.132/ghost_images/sseau/xrf
XRD ICP SSL	Second Sun of month	//129.94.xx.132/ghost_images/sseau/xrd //129.94.xx.132/ghost_images/sseau/icp //129.94.xx.132/ghost_images/sseau/ssl
EMU	Third Sat and Sun of month	//129.94.xx.132/ghost_images/emu
BMSF (F10)	Fourth Sat of month	//129.94.xx.132/ghost_images/bmsf/f10
BMSF (C25)	Fourth Sun of month	//129.94.xx.132/ghost_images/bmsf/c25
BMSF (E26)	Fourth Sun of month	//129.94.xx.132/ghost_images/bmsf/e26



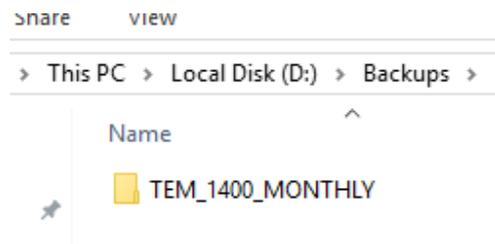
If your workstation is running under another user account rather than the admin account where you installed backupper software. You need to choose the first option adding the task in windows built-in task scheduler.



Full Backup is suggested when you have enough local space for a few local backups.



The folder will look like this after finish:



Nice and Clear.

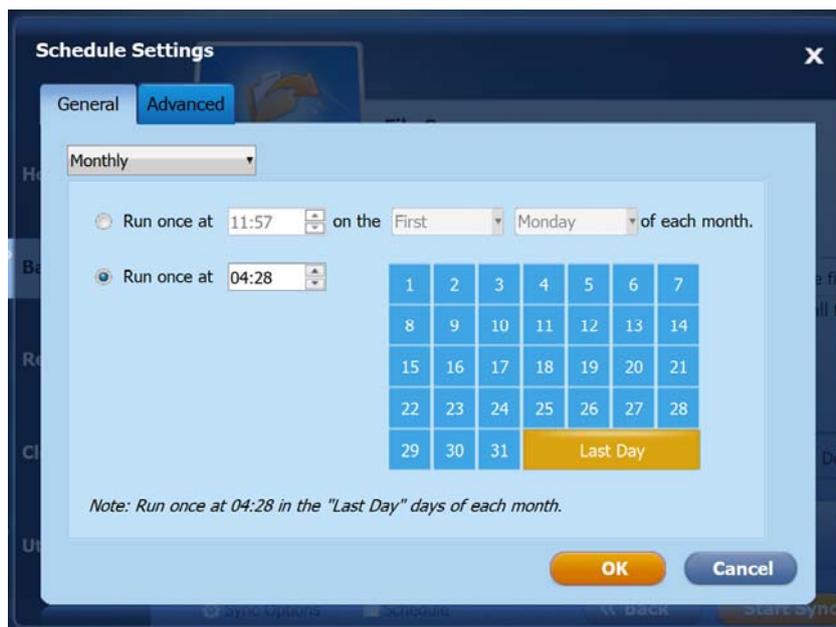
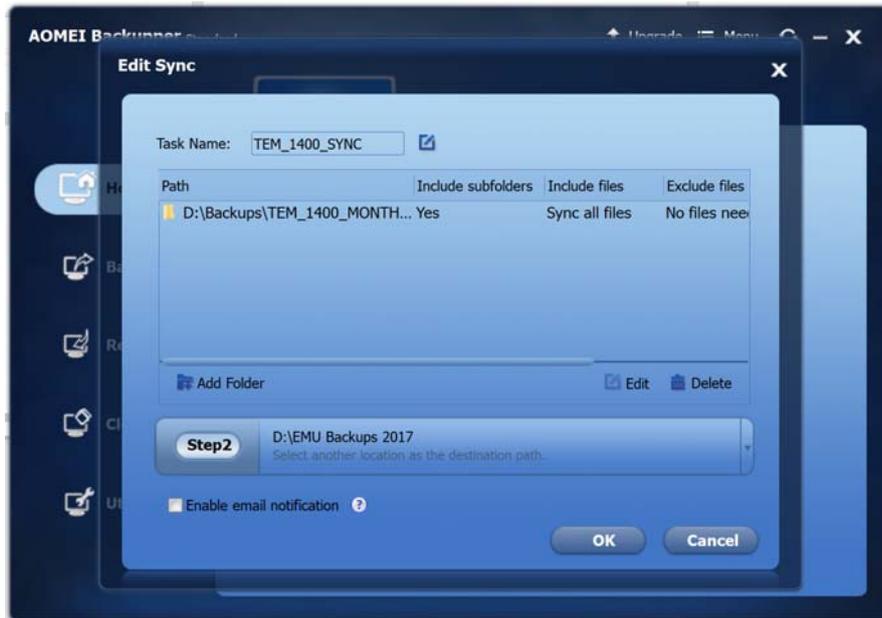
8. File Sync to Network Drive

There are two ways you can achieve this.

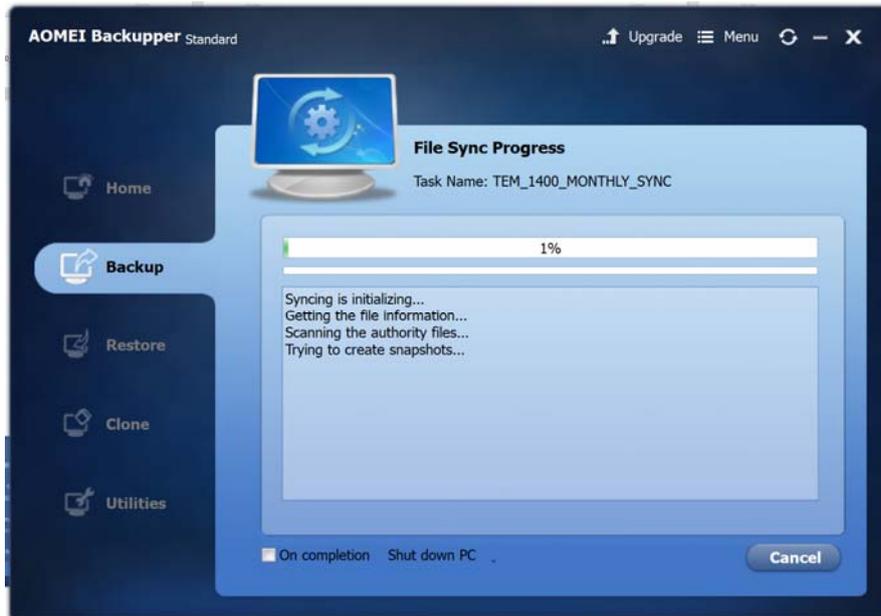
- Use the built-in File Sync function
- Use an external File Sync Software

8.1 The built-in File Sync function





Eg. We make the sync task 2 hours after the backup schedule at 2:28am on the last day of each month.



Sync to network drive:

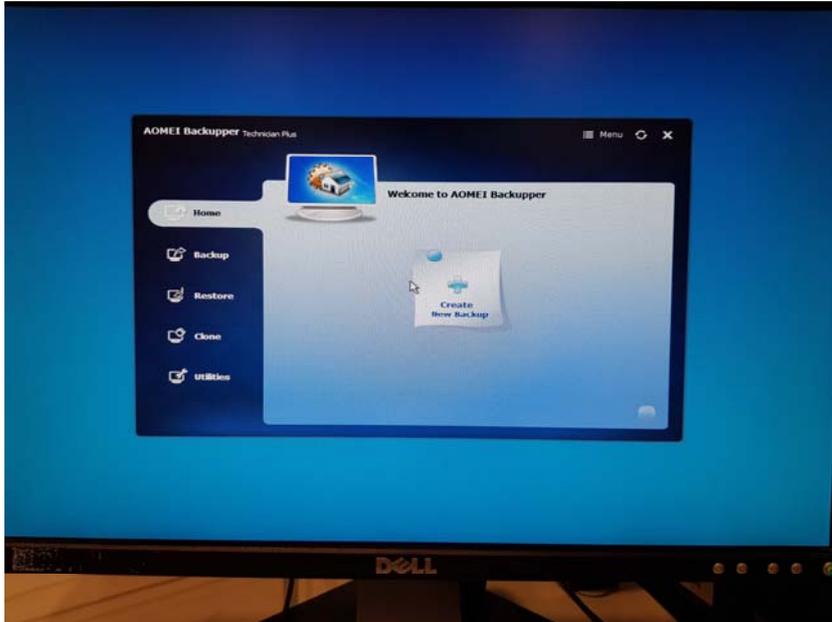


Step 2: Select NAS device, click on “Add share or NAS device”

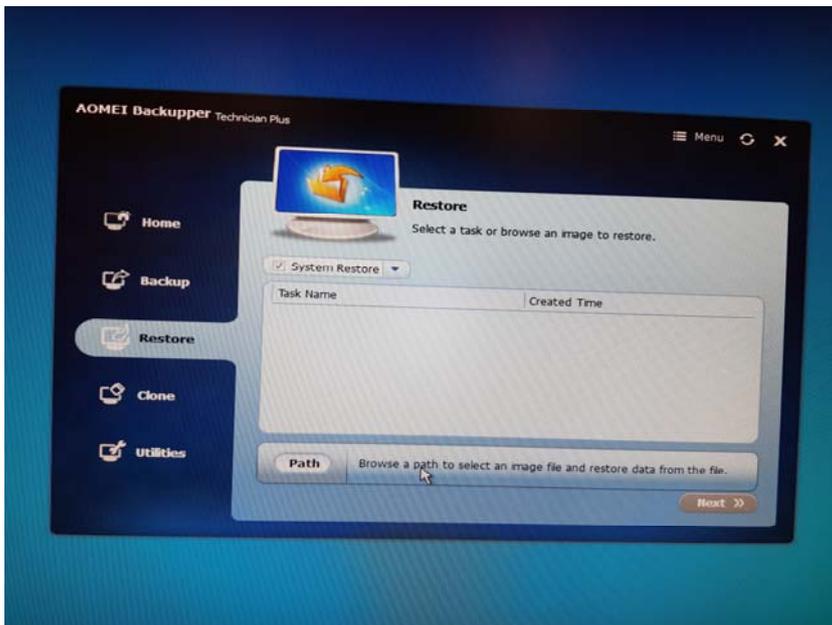


9. Restoration

Step1: Boot up the computer from CD/DVD with AoMei startup disk and you can find following screen.



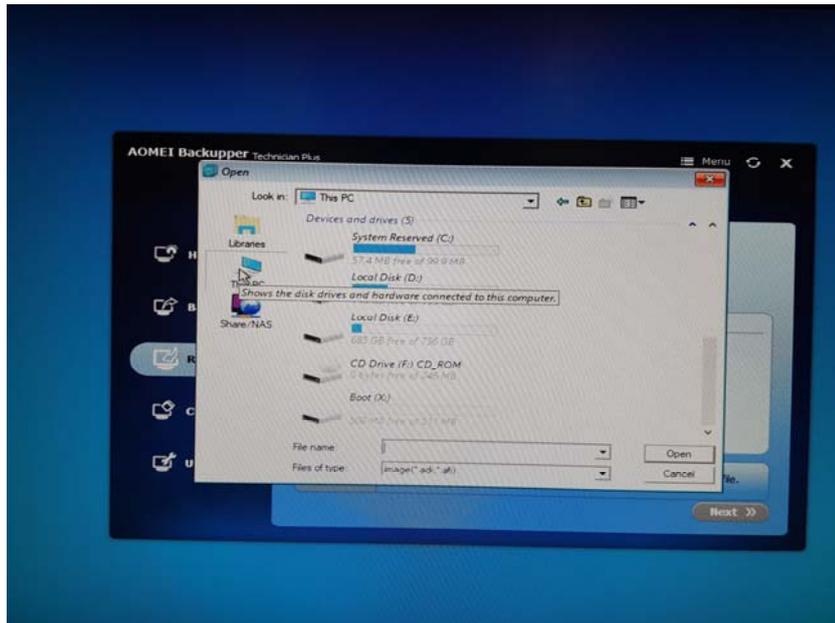
Choose Restore option



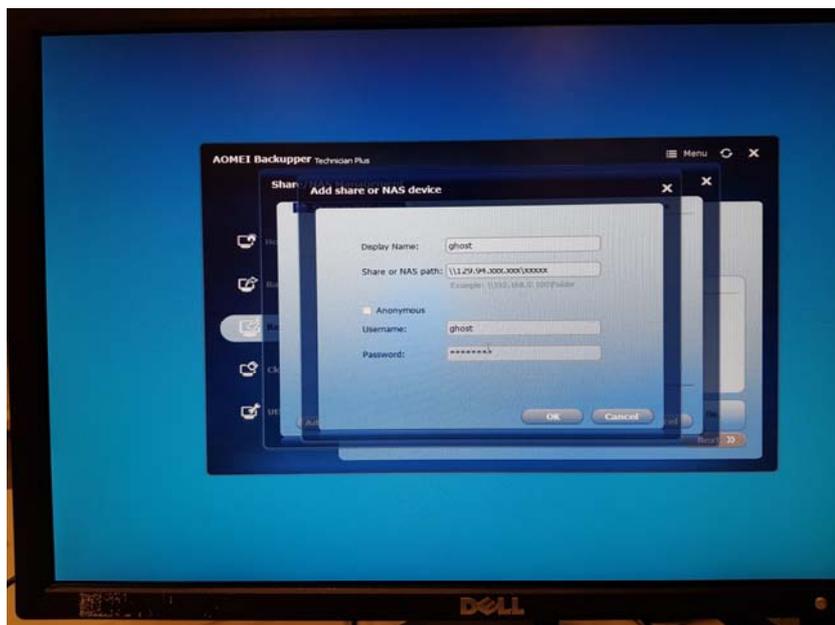
Step 2: Select restore resource path.

As AoMei backup solution have local backup file and network backup file copy, there are two options for restore resource.

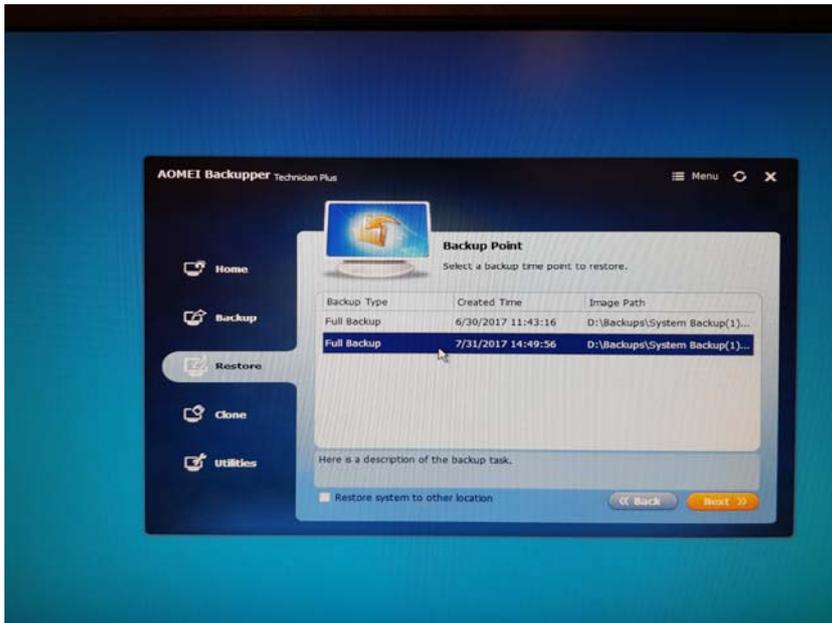
a. If local disk is still working, use local resource path.



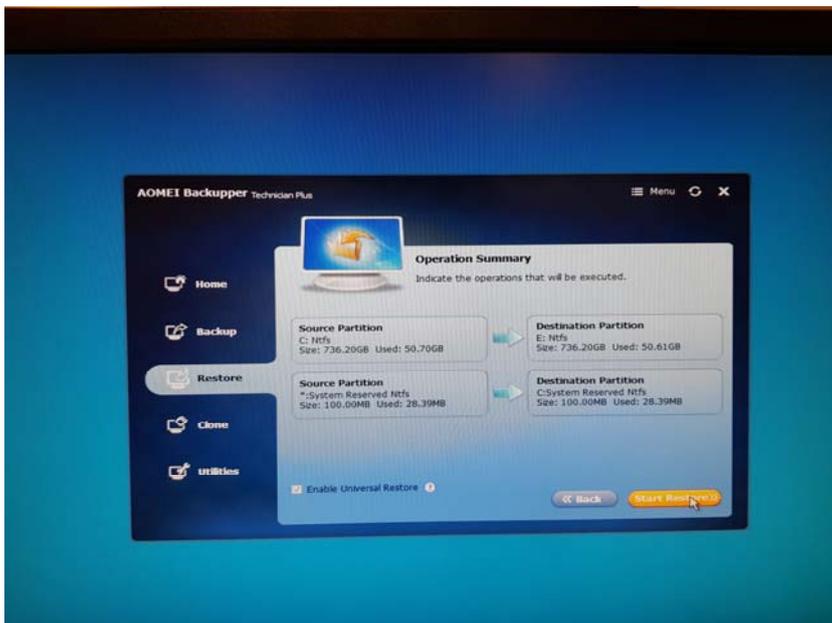
- b. AoMei in Win PE still have network. The network configuration depends on previous setting. If local disk is broken, use network path.



Step 3: AoMei will keep three versions backup files, select least backup version from your backup file list.



Step 4: For system backup file restoration, check the backup file fit with existing disk configuration, then begin to restore.



Step 5: When restore finish, reboot computer with normal sequence (Boot from disk) .

